



A sense of
perspective

This month VIC OLIVER tests the Tata LPT 1518 EX 2 eight ton freight carrier chassis

Tata LPT 1518 Dropside												
	Jhb - Dbn				Jhb - Cape Town				Jhb - Pretoria			
	Laden 2 ways		Laden 1 way		Laden 2 ways		Laden 1 way		Laden 2 ways		Laden 1 way	
Purchase Price Truck-tractor (Rands)	290100		290100		290100		290100		290100		290100	
Purchase Price Trailer (Rands)	80000		80000		80000		80000		80000		80000	
Interest Rate (%)	9		9		9		9		9		9	
Payload (tons)	7.8		7.8		7.8		7.8		7.8		7.8	
Distance (km)	1139.5		1139.5		2797.2		2797.2		113.1		113.1	
Time taken (hrs:min)	16:53		16:09		38:17		37:46		2:01		1:57	
Ave Speed (km/h)	67.5		70.5		73.1		74.1		55.6		57.4	
Fuel Used (litres)	282.6		249.6		649.0		590.2		29.3		24.4	
Consumption (l/100 km)	24.8		21.9		23.2		21.1		25.9		21.6	
Fuel Price (R/l)	9.00		9.00		9.00		9.00		9.00		9.00	
Productivity Factor	21.5		11.7		24.6		12.9		17.9		11.2	
Ave Distance p.a. (km)	109288		116511		126382		129469		60951		72530	
Ave carried p.a. (tons)	1499		799		706		361		8470		5040	
Fixed Costs	Rands/annum		Rands/annum		Rands/annum		Rands/annum		Rands/annum		Rands/annum	
Instalments	92192		92192		92192		92192		92192		92192	
Crew	55744		55744		55744		55744		55744		55744	
Insurance	31088		31088		31088		31088		31088		31088	
Licence	5184		5184		5184		5184		5184		5184	
Overheads	20467		20467		20467		20467		20467		20467	
Total fixed costs	204675		204675		204675		204675		204675		204675	
	R/km	R/Ton	R/km	R/Ton	R/km	R/Ton	R/km	R/Ton	R/km	R/Ton	R/km	R/Ton
Total fixed costs	1.87	136.54	1.76	256.16	1.62	289.91	1.58	566.97	3.36	24.16	2.82	40.61
Variable Costs												
Fuel	2.25	164.09	1.99	290.55	2.11	378.16	1.91	686.56	2.36	16.95	1.96	28.27
Tyres	0.26	19.24	0.27	38.80	0.27	48.24	0.27	96.80	0.24	1.70	0.25	3.54
Maintenance	0.74	53.62	0.74	107.25	0.74	131.66	0.74	263.78	0.74	5.29	0.74	10.58
Toll Fees	0.54	39.16	0.54	78.07	0.18	33.06	0.18	66.09				
Total Costs	5.66	412.65	5.30	770.83	4.92	881.03	4.68	1680.20	6.70	48.10	5.77	83.00

* Productivity = payload (tons) x average speed / fuel consumption (l/100km)

LPT 1518 EX2 Road test by Vic Oliver



On arrival to collect the test vehicle I was impressed to find that this truck and all new Tata LPT 1518 EX 2 models are fitted with upgraded components to improve the durability of the vehicle. These continual product improvements confirm that Tata Motors is adhering to their company vision of supplying quality products to the market.

The 6-speed Tata model GBS 650 gearbox which has an input torque capacity of 650 Nm has now been replaced with the Tata model G 750 gearbox which has torque capacity of 750 Nm. This will result in longer gearbox life.

The 352 mm diameter pull type clutch has been replaced by a 380 mm diameter push type clutch. The new clutch is self-adjusting which reduces the risk of early clutch failure due to incorrect adjustment and eliminates the need for continuous time consuming adjustment in the workshop.

The original flat type propshaft flanges have now been replaced with serrated-type flanges. This reduces the stress on the flange bolts and increases vehicle durability.

The steering dragline arm has been

replaced with a heavy-duty steering dragline arm adding longer life to this safety-critical component.

To improve engine life and reduce the risk of early engine failure the vehicle has been fitted with a water-in-fuel indicator. A warning lamp indicator is fitted in the cab.

A further engine protection device has been fitted as standard on the vehicle, continuously monitoring:

- Coolant level
- Engine temperature
- Oil pressure
- Voltage supply

This engine protection system known by the Tata technicians as the 'Black Box' has a visual and audio warning system that will stop the vehicle within 38 seconds should a fault occur – thereby reducing the risk of complete engine failure.

On the road the vehicle performed and handled well. The Cummins B 180 20 Euro 2 engine with matching power train proved to be adequate for the vehicle which was loaded with 5 000 kg of sand.

I found the Tata 6-speed gearbox

exceptionally easy to operate. The gear change is very smooth and better than any other 8 ton vehicle that we have tested. Thanks to the pneumatic assisted clutch booster the clutch pedal is light and driver friendly.

The inside cab noise is reasonable on the road, due to the viscous fan and low mounted turbocharger. The driver and passenger seat are adjustable, although the adjustment is limited due to the seat touching the back of the cab. The carpeted floor mat is not really practical in a working cab and I would have preferred to have seen heavy duty rubber floor matting fitted in the vehicle.

The dual circuit full S-cam air brake system works well. As standard equipment, twin trailer air line connections are fitted, complete with coupling at the rear of the chassis. Automatic brake slack adjusters are fitted, which eliminate the necessity to continuously reset brake lining clearances. This feature also ensures better vehicle safety.

An exhaust brake is coupled to the service brake. During the test run I found that the exhaust brake wasn't that effective. I didn't like the position of the emergency and handbrake control. The control is fitted low down between the driver's seat and the door. When driving the driver cannot see the emergency and handbrake control.

During the test run I found that it was difficult to read all the dash instrumentation due to the position of the steering wheel and the dash.

The 100 km road test route was mainly on busy highways, from Elandsfontein to Pretoria on the R21 and returning on the N1 and N3.

A fuel consumption of 19,5 litres per 100 km was recorded which, in my opinion, is extremely good and proves that this vehicle is an economical workhorse. ■

TransSolve 2010		Loading (Side View - Summary) TATA LPT 1518 EX2 with Dropside Body			
	Front	Total	Rear		
Tare	3,180 kg	5,260 kg	2,080 kg	Tare	
Extras	222 kg	290 kg	68 kg	Extras	
Body	331 kg	1,531 kg	1,200 kg	Body	
Unladen	3,733 kg	7,081 kg	3,348 kg	Unladen	
Payload	2,265 kg	7,819 kg	5,614 kg	Payload	
Gross	5,938 kg	14,900 kg	8,962 kg	Gross	
Permissible	6,000 kg	14,900 kg	8,000 kg	Permissible	
Overload	-1.03 %	0.00 %	-0.42 %	Overload	
<p>Notes:</p> <ul style="list-style-type: none"> - Included in Unladen = 250l Fuel, Not Specified = Tools, Spare Wheel, Fifth Wheel - Accessories Added = Custom Dropside Body - 220 kg/m - Legislation = South African Road Traffic Act <p>Warnings:</p> <ul style="list-style-type: none"> - The default payload centre of gravity has been adjusted - The cab gap is less than the recommended of 100 mm - Left versus right mass distribution is not calculated 					
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*These graphs illustrate the vehicle's operating costs but are not based on the road test.